

AMENDMENTS TO THE SPECIFICATION:

Sub B1 → [0011] The connection element may be formed of two or more structural members. These structural members may be interrelated by a first interconnection member ~~an interconnecting member~~ which is operative to adjust the spatial disposition of one structural member relative to the other. By adjusting the ~~interconnecting~~ first interconnection member, the user is able to cause the two structural members to be displaced outward from one another effectively expanding the lateral dimensions of the connection element. This lateral expansion facilitates the formation of the pressure fit union of the connection element with the passageway sidewall referenced above.

Sub B2 → [0012] The ~~interconnecting~~ first interconnection member is physically accessible through the slot defined in the first panel. Irrespective of the placement of the ~~interconnecting~~ first interconnection member within the passageways of the two panels, the user may access the first interconnection member ~~interconnecting member~~ for means of either creating the pressure fit union or disengaging that union.

Sub B3 → [0013] The described panel construction permits the construction of a wall panel by first hanging the first wall panel from a preformed ceiling structure. Subsequent to the hanging of the first wall panel, the user may then position the second panel elevationally below the first panel and align the respective passageways of the two panels. It should be understood that in these initial installation procedures, the connection member is preferably secured within the passageway of the first panel. Upon securing the alignment of the two passageways, the user may thereafter release the connection element by physically accessing the ~~interconnecting~~ interconnection member through the slot in the first wall panel. As the connection element is released, it falls under the force of gravity to a position wherein a first portion of the connection element is retained within the passageway of the first panel and a second portion of the connection element is retained within the passageway of the second wall panel. In preferred constructions, the passageway of the second panel is constructed whereby as the connection

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element enters that passageway, a pressure fit is created by the sidewall of the passageway with the exterior surface of the connection element. With the connection element in its desired location, the user may then expand the connection element by further actuation of the interconnection member. As the connection element is expanded it forms a pressure fit with the sidewall of the passageway of the first panel. With the creation of the two pressure fits with the respective sidewalls of the two wall panels, the connection element forms a secure interconnection between the two wall panels. The slot in the first panel may thereafter be covered by means of a releasably configured cover panel.

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[0014] In the event that the user wishes to disassemble the wall assembly, the cover panel is first removed. Thereafter, the connection element is reconfigured to a configuration having a smaller width by actuating the first interconnection member. With the spatial reduction of the connection element, the user may thereafter force the connection element upward into the passageway of the first wall panel eventually removing that element from the passageway of the second wall panel. By actuating the first interconnection member and expanding the connection element, the connection element is fixed in the upward position to facilitate removal of the second wall panel. With the connection element removed from its association with the second panel, that panel is now free to be removed from its positioning relative to the first panel.

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[0017] Fig. 3 is a cross sectional view of the assembly of Fig. 2 taken along section line A-A-F-F.

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[0038] As shown in Fig. 3, the first panel 38 is formed of two planar panels 70 and 72. Each of these panels defines a generally quadrilaterally configured perimeter. The panels are positioned parallel and spacedly apart from one another. Interposed between the two panels is a honeycomb configured element 74 which is typically fabricated from a lightweight material. The two panels 70 and 72 are secured to the element 74 to form an integrated panel assembly. An elongate extruded member 76 is disposed on the upright end of the first panel 38. As shown in Fig. 3 this member 76 defines a generally quadrilaterally configured cross section. The member

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76 further defines two inwardly directed sections 77 and 82. The first inwardly directed section 77 defines a plurality of upstanding sidewalls which are associated one with another to form a box-like structure which extends into the hollow interior of the member 76. One sidewall 81 of the upstanding sidewalls defines an aperture there through dimensioned to threadingly receive a threaded bolt 92.

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[0039] Positioned within the hollow interior of the extruded member 76 are two elements 88 and 90 which, in association, form an interconnection assembly 91. Each of these two elements is an elongate member which extends a preselected distance along the height of the panel 38. The element 90 defines one or more slot like channels 100. These channels may be positioned on opposing sides of the element. Each of these channels 100 is dimensioned to slidably receive a corresponding extension or ear 101 which extends outwardly from the structure of the element 88. The interaction of the ears 101 and the channels 100 tend to confine the displacement of the two element 88 and 90 relative to one another to displacements along a linear axis parallel to the longitudinal axes of the two elements. Each of the channels 100 have a laterally measured width which is greater than the width of its corresponding ear 101 thereby permitting a lateral displacement of the element 88 with respect to the counterpart element 90. The element 90 defines an aperture 94 there through which is dimensioned to receive the threaded portion of the bolt 92. A nut like element 96 is secured to the element 90 proximate the aperture 94. The element 96 is configured to threadingly receive the bolt 92. The element 88 defines an abutment area 98 which is positioned opposite the positioning of the aperture 94. As the bolt 92 is threadingly inserted into the aperture 94 the end of that bolt subsequently comes into abutment against the abutment area 98. As the bolt 92 continues to be driven through the element 96, the bolt causes the element 88 to be displaced in the direction indicated by arrow 102. Furthermore, the same action of the bolt 92 causes the element 90 to be driven in the direction of arrow 103. As the bolt is further driven through the element 96, the two elements 88 and 90 are pushed out laterally from one another into engagement against the interior sidewalls of the extrusion 76 eventually forming a pressure union with that extrusion. To disengage this pressure union, the rotation of the bolt 92 is reversed. The slot 104, which provides access to the bolt 92, may be covered by a pressure fit cover element 106 for aesthetic purposes. In preferred

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constructions, the interconnection assembly 77 91 includes a plurality of bolt 92 assemblies as described, spaced along the height of the assembly 91. These bolt assemblies 92 are positioned in alignment with the apertures 117 and 113 defined in the sidewalls of panels 38 and 112 whereby the bolts 92 may be accessed through the apertures by means of a wrench, e.b. an Allen wrench, configured to interact with the head of the bolts 92.

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[0040] The second box like structure 84 which extends into the interior of the extrusion 76 is disposed on the end wall of the panel 38. The structure 84 is positioned to align with a similar structure 84 defined within an adjacently positioned first panel 38. The structure 84 is dimensioned to receive and retain a ~~connection member~~ sealing structure 86 which is adapted to provide a measure of stability to the interface of the two panels 38. The connection member 86 also forms a gasket seal between abutting panels.

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[0042] Fig. 5 illustrates the interconnection assembly in a collapsed condition wherein the lateral dimension of the assembly 77 91 is minimized thereby permitting the assembly to freely slide within the channel formed within the hollow interior of the extrusion 76. In this particular condition, the ears 101 are in abutment against foremost edge of the channel 100 of the element 90. Fig. 6 illustrates the expanded condition of the assembly 77 91 wherein the assembly 91 achieves its maximum lateral dimension and thereby forms a pressure fit union against the internal sidewalls of the extrusion 76. Notably in this condition the ears 101 are abutted against the opposite edges of the channel 100. Note in Fig. 6 the bolt is longer than the bolt in Fig. 5. One of the bolts is longer to engage the slot so the connector can move up and down but not fall out.

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[0043] As noted in Fig. 2 each of the panels 38 define an elongate slot 117 which extends vertically through the sidewall panel 72. These slots 117 are dimensioned to permit the user to access the bolts 92 of the interconnection assembly 91. It follows that in an assembled condition the bolt 92 is located in the upper reaches of the slot 110. Once a counterpart second panel 112 is positioned in alignment below its first panel 38 so as to position in registration the open channel of its extrusion 116, the bolt 92 may then be rotated to disengage the pressure

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union of the assembly 77 against the internal sidewalls of the extrusion 76. Thereafter the assembly may descend through the hollow interior of the extrusion 76 such that a portion of the assembly enters the open channel of the extrusion 116. The open channel of the extrusion 116 may be fitted with structure which extends into the channel to engage against the exterior sidewall of the interconnection assembly to form a pressure fit therewith and thereby restrict the depth to which the assembly 77 91 may pass into the open channel of the extrusion 116. Note there is an aperture 113 in the bottom panel 112 dimensioned to permit the user to access the bolt 92A at the lower portions of the connector assembly 77 91 (see Fig. 2). Once the assembly has descended a preselected distance downward through the extrusion 76, the bolts 92 may again be rotated to produce a lateral expansion of the assembly and a pressure fit union of the assembly with the extrusion 76. With the assembly in this latter position, the first and second panels are interconnected one to another with a sufficient level of integrity to retain the two panels in a fixed relationship relative to one another.

Sub B11 [0045] Should the user wish to remove a panel 112, the user simply removes the cover plug 127 and the closure plug 131 to access the various bolts 92. Unscrewing the bolts 92 causes the assembly 77 91 to laterally contract thereby disrupting the pressure fit union which secured that assembly to the interior sidewalls of the respective channels of each of the panels 112 and 38. Once the assembly has been freed, it may be slid upwardly through the channel 136 of panel 38 until its lower end clears the channel 139 of the panel 112. Once the assembly 77 91 has cleared the lower channel, the upper panel 38 may be raised slightly to permit the lower panel 112 to be raised and disengaged from its base track. Thereafter, the panel 112 may be removed from its positioning by inclining the panel slightly and thereafter pulling the panel 112 outwardly. Since the panel 112 is not connected to the panels 112 positioned on either side of it, the panel 112 may be removed without interrupting the two adjacent panels 112.

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Sub B12 [0046] Similarly, the panel 38 may be removed after disengaging the interconnection assembly 77 91 from its association with the lower panel 112 by unscrewing bolt 46 from its association with nut 51. Thereafter, one or more of the battens 57 may be removed to permit the panel 38 to be laterally pulled out of the wall assembly. Again, since the panel 38 is not

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physically connected to the adjacently positioned panels 38, the panel 38 may be removed without disrupting the positioning of the adjacently positioned panels 38.

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